

## SECTION 600 REVISIONS

The Standard Specifications are revised as follows:

SECTION 601, BEGIN LINE 19, DELETE AND INSERT AS FOLLOWS: [601.02]

~~Concrete~~ *PCC* in anchors *and in pads or bases for impact attenuators* shall be class A, in accordance with 702. Sheet signs and sign posts shall be in accordance with 802.

*Barrels used in impact attenuators shall be yellow with black lids. The aggregate used in the barrels shall be uncrushed gravel, class F or higher, in accordance with 904.02(b) and the following gradation requirements.*

SECTION 604, BEGIN LINE 11, DELETE AND INSERT AS FOLLOWS: [604.02]

Coarse Aggregate, Class D or Higher, ~~size~~ Size No. 53 ... 904.02  
Concrete, Class A ..... 702  
Fine Aggregate, ~~size~~ Size No. 23 or ~~No.~~ 24 ..... 904.01

SECTION 604, BEGIN LINE 123, DELETE AND INSERT AS FOLLOWS: [604.07(c)]

**(c) Placing HMA Sidewalk.** HMA sidewalk material shall be in accordance with 402 and placed on a compacted bed course in one or more courses as indicated so as to give the required depth when rolled. The mixture shall consist of HMA base, intermediate, or surface, type A *in accordance with 402. Mixture adjustments in accordance with 904.02(a) will not apply. A MAF in accordance with 402.05 will not apply.* Aggregate requirements of ~~904.02(d)~~ 904.03(d) do not apply. Compaction shall be accomplished by means of a hand operated or power roller of an acceptable type and mass (weight) *in accordance with 402.15.* In areas inaccessible to the roller, hand tamping will be permitted. In any case, the HMA sidewalk material shall be uniformly compacted.

SECTION 604, BEGIN LINE 140, DELETE AS FOLLOWS:

**604.09 Method of Measurement.** Reconstructed concrete sidewalks and re-laid concrete sidewalks will be measured by the square meter (square yard) of finished surface. HMA for sidewalks will be measured by the megagram (ton) of HMA mixture placed. Bed course material will be measured by the megagram (ton).

SECTION 604, AFTER LINE 171, INSERT AS FOLLOWS: [604.10]

*HMA for Sidewalk ..... Mg (TON)*

SECTION 604, BEGIN LINE 192, DELETE AND INSERT AS FOLLOWS: [604.10]

The cost of furnishing and applying sand to finished compacted surfaces shall be included in the cost of ~~sidewalk~~, *HMA for sidewalk.*

SECTION 605, LINE 12, DELETE AND INSERT AS FOLLOWS: [605.02]

Coarse Aggregate, Class D or Higher, ~~size~~ Size No. 53 ... 904.02

SECTION 605, BEGIN LINE 171, DELETE AND INSERT AS FOLLOWS: [605.07(c)]

**(c) Mixture.** ~~Unless otherwise specified, the HMA mixture shall be in accordance with 402 for HMA surface 9.5 mm, except that the percent passing the 75  $\mu$ m (No. 200) sieve shall be between 3.0% and 9.0%, the minimum percent crushed shall be 95%, and the binder content shall be 7.0%. Mixture adjustments in accordance~~

~~with 904.02(a) will not apply. Aggregate requirements of 904.02(d) do not apply. Weather limitations shall be in accordance with 402.10. The mixture shall be HMA Surface Type A in accordance with 402 except no RAP shall be used, the binder content shall be 7.0%, and the gradations shall meet the following.~~

<i>HMA Curbing Gradations</i>	
<i>Sieve Size</i>	<i>Percent Passing Sieves</i>
<i>12.5 mm (1/2 in.)</i>	<i>100.0</i>
<i>9.5 mm (3/8 in.)</i>	<i>80.0 – 100.0</i>
<i>4.75 mm (No. 4)</i>	<i>73.0 ± 5.0</i>
<i>600 µm (No. 30)</i>	<i>20.0 – 50.0</i>
<i>75 µm (No. 200)</i>	<i>6.0 – 12.0</i>

A MAF in accordance with 402.05 will not apply. Weather limitations shall be in accordance with 402.12. Acceptance of HMA mixtures will be in accordance with 402.09 except the gradation tolerances shall be  $\pm 2.5\%$  on the 75 µm (No. 200) sieve,  $\pm 4.0\%$  on the 4.75 mm (No. 4) sieve, and binder content tolerance shall be  $\pm 0.5\%$  from DMF.

SECTION 606, BEGIN LINE 1, DELETE AND INSERT AS FOLLOWS:

### **SECTION 606 – ~~Blank~~ SHOULDER CORRUGATIONS**

**606.01 Description.** This work shall consist of placing corrugations in paved shoulders in accordance with 105.03. Corrugations shall not be constructed within the limits of reinforced concrete bridge approaches or on bridge decks.

The operation shall be coordinated such that milled materials do not encroach on pavement lanes carrying traffic and all milled materials are disposed of in accordance with 104.07.

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The corrugations shall be constructed by cutting smooth strips in existing or newly constructed shoulders. The operation shall be conducted by means of a cutting machine that provides a series of smooth cuts without tearing or snagging. The equipment shall include guides to maintain uniformity and consistency in the alignment of the strips.

**606.02 Method of Measurement.** HMA and PCCP shoulder corrugations will be measured by the meter (linear foot), measured parallel to the center line of the roadway. Gaps in PCCP shoulder corrugations at the D-1 joints will be included as milled PCCP corrugations.

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**606.03 Basis of Payment.** HMA and PCCP shoulder corrugations will be paid for at the contract unit price per meter (linear foot), when specified.

Payment will be made under:

**Pay Item**

**Pay Unit**

*Milled HMA Shoulder Corrugations.....m (LFT)*  
*Milled PCCP Shoulder Corrugations .....m (LFT)*

SECTION 608, BEGIN LINE 11, DELETE AND INSERT AS FOLLOWS: [608.02]

Coarse Aggregates, Class A, ~~B, C, or~~ D or Higher,  
 Size No. 8 ..... 904.02

SECTION 610, BEGIN LINE 15, DELETE AND INSERT AS FOLLOWS:

**610.02 Materials.** Materials shall be in accordance with 402, 500, or 700, whichever is applicable. HMA mixture for approaches may be that specified for mainline or HMA base, intermediate, or surface type A, B, or C in accordance with 402. ~~Mixture adjustments in accordance with 904.02(a) will not apply to approaches. A MAF in accordance with 402.05 will not apply. Mixtures will be sampled, tested, and accepted in accordance with 402.06(a) 402.09 unless the mixtures are supplied in accordance with 401.08 as allowed in 402.03. When mixtures in accordance with 401.08 are supplied, all applicable requirements of 401.02 shall be met and acceptance will be in accordance with 402.06(b).~~

SECTION 610, BEGIN LINE 37, DELETE AND INSERT AS FOLLOWS: [610.03]

The course or courses shall be compacted ~~with either a three wheel roller or a tandem roller~~ in accordance with ~~408.03(d) 402.15~~. Areas inaccessible to the roller equipment shall be thoroughly compacted with mechanical tamps, vibrators, or other approved compacting methods.

SECTION 610, BEGIN LINE 49, DELETE AND INSERT AS FOLLOWS:

**610.04 Existing Approaches and Crossovers.** If an existing asphalt surface is to be left in place as an approach pavement or crossover, and if directed, ~~such~~ the surface shall be patched in accordance with ~~305.05 304.04~~.

SECTION 610, BEGIN LINE 89, DELETE AND INSERT AS FOLLOWS:

**610.06 Method of Measurement.** HMA mixtures ~~and compacted aggregate~~ will be measured by the megagram (ton). ~~Compacted aggregate base will be measured in accordance with 301.09. Cement Reinforced concrete bridge approach pavement~~ will be measured

by the square meter (square yard) ~~in accordance with 501.25. Plain cement concrete pavement substituted for HMA mixture for approaches will be measured in accordance with 610.07. Reinforcing steel will be measured in accordance with 703.07.~~

SECTION 610, BEGIN LINE 99, DELETE AND INSERT AS FOLLOWS:

**610.07 Basis of Payment.** The accepted quantities of HMA mixture for approaches, ~~turn lanes, passing lanes, acceleration lanes, deceleration lanes, recovery lanes, driveways, or mailbox approaches~~ will be paid for at the contract unit price per megagram (ton) for HMA approaches. ~~Compacted aggregate base will be paid for at the contract unit price per megagram (ton) in accordance with 301.10. Cement Reinforced concrete bridge approach pavement~~ will be paid for at the contract unit price per square meter (square yard). Reinforcing steel will be paid for at the contract unit price per kilogram (pound).

SECTION 610, BEGIN LINE 116, DELETE AND INSERT AS FOLLOWS: [610.07]

Cement Concrete Pavement, \_\_\_\_\_, \_\_\_\_\_ mm.....m2

type—thickness

(Cement Concrete Pavement, \_\_\_\_\_, \_\_\_\_\_ in. .... SYS)

type—thickness

Compacted Aggregate. \_\_\_\_\_ No. 53 ..... Mg (TON)

type

HMA for Approaches Type \* ..... Mg (TON)

Reinforced Concrete Bridge Approach, \_\_\_\_\_ mm ..... m2

thickness

(Reinforced Concrete Bridge Approach \_\_\_\_\_ in. .... SYS)

thickness

Reinforcing Steel..... kg (LBS)

\* Mixture Type in accordance with 402.04

SECTION 611, BEGIN LINE 3, DELETE AND INSERT AS FOLLOWS:

**611.01 Description.** This work shall consist of the construction of permanent crossovers, private or commercial driveways, or mailbox installations, ~~or it shall consist of the placement, maintenance, removal, closure, or refurbishing of temporary crossovers in accordance with these specifications and in reasonably close conformance with the lines, grades, and details shown on the plans or as directed~~ 105.03.

## MATERIALS

**611.02 Materials.** Materials for crossover, driveway, and mailbox pavements shall be in accordance with the applicable requirements of 402 or ~~504~~ 502 as applicable. HMA mixtures shall consist of HMA base, intermediate, or surface, *type A, B or C in accordance with 402*. Other materials shall be in accordance with the following:

Mailbox Support Galvanized Hardware ..... ASTM A 153  
 Nominal Standard Galvanized Pipe..... ASTM A 120  
 Permanent Traffic Markings ..... 808  
 Traffic Control Devices..... 801  
 Treated Wood Posts ..... 911.02(e)

## CONSTRUCTION REQUIREMENTS

**611.03 General Requirements.** Except as otherwise provided, all applicable provisions of the section under which the mixture being used for paving the specified area is made shall apply. Subgrade shall be prepared in accordance with ~~207.04~~ 207. The course or courses shall be compacted with either a three wheel or a tandem roller in accordance with ~~408.03(d)~~ 402.15.

SECTION 611, BEGIN LINE 93, DELETE AND INSERT AS FOLLOWS:

**611.07 Basis of Payment.** The accepted quantities of cement concrete pavement will be paid for at the contract unit price per square meter (square yard) for the use specified. Compacted aggregate will be paid for at the contract unit price per megagram

(ton) ~~for the type specified in accordance with 610.07.~~ HMA mixture will be paid for at the contract unit price per megagram (ton) ~~for the specified type of material as HMA for approaches in accordance with 610.07.~~ Preformed joint material, when specified as a pay item, will be paid for at the contract unit price per meter (linear foot), complete in place. ~~The accepted quantities of temporary crossovers will be paid for at the contract unit price per each for the type specified. The accepted quantity of refurbishing existing temporary crossovers will be paid for at the contract unit price per each for the type specified. HMA mixtures required for temporary crossovers will be paid for as HMA for approaches, complete in place in accordance with 610.07.~~

The accepted quantities for pavement placed for mailbox approaches will be included with quantities required to construct the shoulder section, when the shoulder is paved. If the shoulder is unpaved, the pavement placed for mailbox approaches will be paid for as HMA mixture ~~for approaches and compacted aggregate base in accordance with 610.07.~~ Mailbox assemblies will be paid for at the contract unit price for each, complete in place.

SECTION 611, BEGIN LINE 132, DELETE AS FOLLOWS: [611.07]

Compacted Aggregate, _____	Mg (TON)
_____ type	
HMA for _____	Mg (TON)
_____ mixture	

SECTION 615, BEGIN LINE 3, DELETE AND INSERT AS FOLLOWS:

**615.01 Description.** This work shall consist of furnishing and setting, setting only, or resetting right-of-way markers, monuments for marking section or other lines, bench-mark posts and tablets, and parking barriers in accordance with these specifications ~~and in reasonably close conformance with details shown on the plans or as directed~~ 105.03.

SECTION 615, BEGIN LINE 12, DELETE AND INSERT AS FOLLOWS: [615.02]

Coarse Aggregate, Class A or Higher, Size No. 5, No. 8,	
or No. 91 .....	904.02
Fine Aggregate, Size No. 23.....	904.01

SECTION 615, BEGIN LINE 52, DELETE AND INSERT AS FOLLOWS: [615.04]

The pin shall be set perpendicular to and flush with the top of the monument while the concrete is plastic and left undisturbed until the concrete has set. The pin shall be copper and shall be 25 mm (1 in.) in diameter and ~~130~~ 125 mm (5 in.) long. If for type

SECTION 616, BEGIN LINE 9, DELETE AND INSERT AS FOLLOWS:

**616.02 Materials.** Materials shall be in accordance with the following:

Asphalt Joint Filler .....	906.01
Clay .....	903.01
Concrete, Class A .....	702

<i>Fine Aggregate, Size No. 23.....</i>	<i>904</i>
<i>Geotextile .....</i>	<i>913.18</i>
<i>Portland Cement.....</i>	<i>901.01(b)</i>
<i>Precast Concrete Riprap.....</i>	<i>905.04</i>
<i>Riprap .....</i>	<i>904.04</i>
<i>Water.....</i>	<i>913.01</i>
<i>Welded Steel Wire Fabric .....</i>	<i>910.01(b)5</i>

Welded wire fabric shall be 150 mm by 150 mm (6 in. by 6 in.) mesh, W-3 x W-3 wires, with a mass (weight) per square area of 205 kg/100 m<sup>2</sup> (42 lb/100 ft<sup>2</sup>).

## CONSTRUCTION REQUIREMENTS

**616.03 Placing Dumped Riprap.** Dumped riprap shall be placed to produce a surface of approximate regularity but need not necessarily be hand placed. The finished surface shall vary no more than ~~230~~ **225** mm (9 in.) from a true plane. The thickness perpendicular to its surface shall be no more than 0.6 m (2 ft) nor less than 0.3 m (1 ft) unless otherwise directed.

**616.04 Placing Grouted Riprap.** *The aggregate, preparation of the slope, and the depth of riprap aggregate for grouted riprap shall be in accordance with 616.05. After the aggregate has been placed and accepted, all openings shall be filled with cement grout. The finished surface shall be approximately smooth, solid, and true to line, grade, and section.*

*Grout shall be composed of one part portland cement and four parts fine aggregate. The portland cement and fine aggregate shall be dry-mixed to a uniform mixture. Water shall be added as the mixing continues until the grout attains a consistency that will allow it to flow into the openings.*

**616.04 616.05 Placing Revetment, Class 1, and Class 2 Riprap.** Revetment, class 1 and class 2 riprap may be placed by dumping and shall be placed to the required thickness. The finished surface shall be free from clusters of small stones or of large ones. The finished surface shall vary from a true plane no more than ~~230~~ 225 mm (9 in.) for revetment riprap or 450 mm (18 in.) for class 1 or class 2 riprap but shall not be less than the minimum depth specified.

**616.05 616.06 Placing Uniform Riprap.** Uniform riprap shall be placed to produce a surface of approximate regularity with edges having projections no more than ~~400~~ **75** mm (4 **3** in.) above the required cross section. The material shall be hand laid or placed by other approved means.

SECTION 616, CONTINUED.

### **~~616.06 Blank~~**

**616.07 Placing Grouted Riprap. ~~Blank~~** ~~The aggregate, preparation of the slope, and the depth of riprap aggregate for grouted riprap shall be in accordance with 616.04. After the aggregate has been placed and accepted, all openings shall be filled with~~

~~cement grout. The finished surface shall be approximately smooth, solid, and true to line, grade, and section.~~

SECTION 616, BEGIN LINE 159, DELETE AND INSERT AS FOLLOWS: [616.02]

If slag is used as dumped riprap and payment will be made per megagram (ton), the pay quantity will be adjusted in accordance with ~~904.02(a)~~ *904.01*.

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